

001280581

WPI Acc No: 75-G4490W/197525

Position control of operating fable for radiation therapy - arrangement and method for holding a position reference between an emitter and a receiver object

Patent Assignee: LESCENIER C (LESC-I)

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
DE 2361155	A	19750612					197525 B
FR 2269745	A	19760102					197608
DE 2361155	C	19861120					198647

Priority Applications (No Type Date): DE 2361155 A 19731207

Abstract (Basic): DE 2361155 A

The radiation source is accommodated in a fastening device and produces a radiation beam which impinges on the target area of the patient on a table which can move in the X and Y directions. There is a sensor for reflected radiation, which produces a signal proportional to the intensity for feeding it into the control arrangement. The controls actuate the object drive to move into the middle of the beam where the intensity is greatest, using blocks. The control system has facilities for comparing the intensity signal with the position location signal, and also for controlling the shape of the beam. Removable radiation absorbsion blocks are kept in position by spring loaded holders. Timers and slits are provided to control and check the beam.

Title Terms: POSITION; CONTROL; OPERATE; RADIATE; THERAPEUTIC; ARRANGE; METHOD; HOLD; POSITION; REFERENCE; EMITTER; RECEIVE; OBJECT

Derwent Class: P31; P34; S05; T06

International Patent Class (Additional): A61B-006/08; A61N-005/00;

G05D-003/00

File Segment: EPI; EngPI

009747350 **Image available**

WPI Acc No: 94-027201/199404

XRAM Acc No: C94-012580

XRPX Acc No: N94-021052

**Remouldable radiation levelling device for breast cancer treatment -
having PMMA plate attached to gel filled silicone bag which is placed
over breast and can be reused**

Patent Assignee: KATSOHI D (KATS-I)

Inventor: KATSOHI D

Number of Countries: 019 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
DE 4223488	A1	19940120	DE 4223488	A	19920717	A61N-005/10	199404 B
WO 9402203	A1	19940203	WO 93DE607	A	19930708	A61N-005/00	199406
DE 4223488	C2	19940428	DE 4223488	A	19920717	A61N-005/10	199415

Priority Applications (No Type Date): DE 4223488 A 19920717

Cited Patents: DE 2850248; EP 21415; US 4556070; US 4640280

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
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DE 4223488	A1		5			
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WO 9402203	A1	G	13			
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Designated States (National): CA JP US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL
PT SE

DE 4223488	C2		5			
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Abstract (Basic): DE 4223488 A

A remouldable levelling device for radiation treatment of uneven bodies, esp. human bodies, contains within a gas tight cover a filler which is fluid or easily deformable. The cover has a rigid surface at least towards the side facing the radiation source but the side towards the body is easily deformable. It is important that air gas bubbles are excluded and that the joint (4) is gas tight. The device is placed over the breast (5) and moulds itself to shape to control the applied radiation (6). Alternatively constructions use water or sand as the filling material (1) and use a plexiglass box for radiation from three sides.

USE/ADVANTAGE - For evening out and controlling the intensity of radiation in the treatment of breast cancer. The device will take up the shape of the patient and can be reused.

Dwg.1/2

Title Terms: REMOULding; RADIATE; LEVEL; DEVICE; BREAST; CANCER; TREAT;
PMMA; PLATE; ATTACH; GEL; FILLED; SILICONE; BAG; PLACE; BREAST; CAN;
REUSE

Index Terms/Additional Words: POLYMETHYLMETHACRYLATE

Derwent Class: A26; A96; D22; K08; P34; S05

International Patent Class (Main): A61N-005/10

File Segment: CPI; EPI; EngPI

011528182 **Image available**

WPI Acc No: 97-504663/199747

XRFX Acc No: N97-420315

Stereotaxial targetted irradiation process for brain tumours - corrects for deviation of target from isocentrum by back direction to give continual accuracy

Patent Assignee: BRENNEISEN W (BREN-I)

Inventor: BRENNEISEN W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
DE 19614643	A1	19971016	DE 1014643	A	19960413	A61N-005/10	199747 B

Priority Applications (No Type Date): DE 1014643 A 19960413

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
DE 19614643	A1		4			

Abstract (Basic): DE 19614643 A

The process of stereotaxial irradiation of target areas in the brain such as tumours (4) is improved by the use of a control system which registers and compensates for linear travel of the target area from the isocentrum during the radiation period. The control system comprises a position sensitive device (14) which electronically monitors the relative positions of target and isocentrum by means of light indicators (9,12) and a retroreflector (11).

An adjustment device on the patient's couch (1) is coupled to the control system and allows for automatic adjustment if the position of the target area has deviated from the isocentrum during the radiation process. Thus treatment is continually accurately directed at the tumour.

ADVANTAGE - Light indicator system for determining position of target, e.g. brain tumour, relative to isocentrum during stereotaxial irradiation also corrects patient's position for continual accuracy.

Dwg.1/1

Title Terms: TARGET; IRRADIATE; PROCESS; BRAIN; TUMOUR; CORRECT; DEVIATE; TARGET; BACK; DIRECTION; CONTINUE; ACCURACY

Derwent Class: P34; S02; S05; T06

International Patent Class (Main): A61N-005/10

International Patent Class (Additional): G01B-011/00; G05D-003/12

File Segment: EPI; EngPI

003938577

WPI Acc No: 84-084121/198414

XRFX Acc No: N84-062797

Thin field-light mirror for medical electron accelerator - can be left fixed in X-ray or electron beam and comprises plastics film metallised with aluminium coating

Patent Assignee: VARIAN ASSOC INC (VARI)

Inventor: LARIVIERE P D

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
GB 2127173	A	19840404	GB 8322100	A	19830817		198414 B
FR 2551664	A	19850315					198516

Priority Applications (No Type Date): US 82416795 A 19820913

Patent Details:

Patent	Kind	Lan	Pg	Filing Notes	Application	Patent
GB 2127173	A		4			

Abstract (Basic): GB 2127173 A

The mirror (25) would ideally be completely transparent to both x-ray and electron beams. Since conventional glass mirrors are not sufficiently transparent to lower-energy electrons mirror is a thin film of a plastic material metallised with an aluminium coating. It is made by securing a sheet of plastic under tension over a suitably flat circular ring. The plastic thickness is about 2 mils (about 5mg/ square cm) in surface density).

The thickness of the aluminium coating is of the order of the wave length of visible light to be reflected and hence is negligible as compared to that of the plastic film. A number of plastics or other materials can be used for production of such a film, but the present material of choice is Dupont's Kapton (TM) plastic because of its superior resistance to radiation damage.

.2/2

Title Terms: THIN; FIELD; LIGHT; MIRROR; MEDICAL; ELECTRON; ACCELERATE; CAN ; LEFT; FIX; X-RAY; ELECTRON; BEAM; COMPRISE; PLASTICS; FILM; METALLISE; ALUMINIUM; COATING

Index Terms/Additional Words: RADIATE; THERAPEUTIC; TREAT

Derwent Class: P34; P81; S05

International Patent Class (Additional): A61N-005/10; G02B-001/04

File Segment: EPI; EngPI